

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

THE TRUSTEES OF
PURDUE UNIVERSITY,

Plaintiff,

v.

STMICROELECTRONICS N.V., and
STMICROELECTRONICS, INC.,

Defendants.

Civil Action No. 6:21-cv-00727

JURY TRIAL DEMAND

PLAINTIFF'S COMPLAINT FOR PATENT INFRINGEMENT AND JURY DEMAND

Plaintiff The Trustees of Purdue University (“Purdue”) files this Complaint for Patent Infringement and Jury Demand against Defendants STMicroelectronics N.V. and STMicroelectronics, Inc. (collectively “ST”), and alleges as follows:

I. PARTIES

1. Purdue is a statutory body corporate that operates and conducts a state educational institution having its principal place of business at 610 Purdue Mall, West Lafayette, Indiana 47907.

2. Purdue is a public land-grant research university under the 1862 Morrill Act that was founded in 1869 and is consistently ranked among the top universities in the United States and the world. Purdue enrolls more than 40,000 students under the guidance of over 16,000 faculty and staff. On September 14, 2020, Purdue was named the fifth most innovative school in the United States by the U.S. News & World Report. Purdue’s professional and graduate programs include the well-ranked College of Engineering, Krannert School of Management, College of Education, and College of Pharmacy. Purdue’s esteemed School of Aeronautics and Astronautics within the

College of Engineering has acquired the nickname “Cradle of Astronauts” for the twenty-six astronauts, including Neil Armstrong and Gus Grissom, it has produced.¹ Other notable Purdue alumni are Nobel Prize winners Edward Mills Purcell, Ben Roy Mottelson, and Akira Suzuki. Purdue has also produced twenty-four National Academy of Engineering members.

3. Purdue is the State of Indiana’s primary driver for economic growth in science and technology. For example, Purdue spent over \$435,185,000 on research during the 2019-2020 fiscal year, founded more than 80 technology startups, and raised more than \$96,000,000 in venture capital funding. In 2019, Purdue ranked 13th globally for receiving U.S. utility patents according to the National Academy of Inventors and Intellectual Property Owners Association’s annual report. This distinction marks the sixth straight year that Purdue has ranked in the top 20.²

4. Purdue is an instrumentality of the State of Indiana, created and authorized by the Indiana General Assembly pursuant to Indiana Code § 21-23-2-1, *et seq.*, and thus enjoys sovereign immunity. *Kashani v. Purdue Univ.*, 813 F.2d 843, 845 (7th Cir. 1987); *Wasserman v. Purdue Univ.*, 431 F. Supp. 2d 911, 916 (N.D. Ind. 2006) (“[T]he Board of Trustees [of Purdue] is a political arm of the state which is immune to suit.”); *Harris v. Trustees of Purdue Univ.*, 2017 WL 529598, at *2 (S.D. Ind. Feb. 8, 2017).

5. By filing this lawsuit or prosecuting this action, Purdue does not waive, either expressly or implicitly, its sovereign immunity or the sovereign immunity enjoyed by any arm of the State of Indiana under the laws of the United States or the State of Indiana, to any *inter partes* review, *ex parte* reexamination, or other post-grant proceeding at the United States Patent and

¹ <https://www.purdue.edu/newsroom/stories/2020/Stories%20at%20Purdue/purdue-named-5th-most-innovative-school-in-the-country.html>; <https://www.purdue.edu/space/astronauts.php> (last accessed July 13, 2021).

² <https://www.purdue.edu/datadigest/>; <https://purduefoundry.com/startups>; <https://www.purdue.edu/newsroom/releases/2020/Q2/purdue-ranks-13th-worldwide-among-universities-granted-u.s.-utility-patents.html> (last accessed July 13, 2021).

Trademark Office or its Patent Trial and Appeal Board, to any other administrative actions or proceedings, to any noncompulsory counterclaims, or to any other federal or state proceedings whatsoever, whether initiated by ST or any other entity.

6. Defendant STMicroelectronics N.V. is a corporation organized under the laws of The Netherlands, with a place of business at WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol, The Netherlands.

7. Defendant STMicroelectronics, Inc., a wholly owned subsidiary of STMicroelectronics N.V., is a corporation organized under the laws of the State of Delaware, with a place of business at 750 Canyon Drive, Suite 300, Coppell, TX 75019. STMicroelectronics, Inc. may be served through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

II. JURISDICTION

8. This is an action for patent infringement arising under the Patent Laws of the United States of America, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

9. This Court has personal jurisdiction over each Defendant under the laws of the State of Texas, due at least to its substantial business in Texas and in this District, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein, and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in the State of Texas.

10. Each Defendant, acting alone and/or in concert with and/or at the direction and subject to the control of the other Defendant, directly and/or through subsidiaries and agents (including distributors, retailers, and others), makes, imports, ships, distributes, offers for sale, sells, uses, and advertises (including offering products and services through its website,

<https://www.st.com>, as well as other retailers) its products and/or services in the United States, the State of Texas, and this District.

11. Each Defendant, acting alone and/or in concert with and/or at the direction and subject to the control of the other Defendant, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the expectation that the products will be purchased and used by customers in this District. These infringing products have been and continue to be purchased and used by customers in this District. ST has committed acts of patent infringement within the State of Texas and, more particularly, within this District. This Court's exercise of personal jurisdiction over ST is thus consistent with the Texas long-arm statute, Tex. Civ. Prac. & Rem. Code § 17.042, and traditional notions of fair play and substantial justice.

12. This Court has specific personal jurisdiction over STMicroelectronics N.V. because it is a foreign corporation and patent infringement is a claim that arises under federal law; therefore, service of summons or a waiver of service by STMicroelectronics N.V. will establish personal jurisdiction under Fed. R. Civ. P. 4(k)(2).

13. Furthermore, STMicroelectronics, Inc previously did not challenge, and thereby submitted to, this Court's personal jurisdiction. *See, e.g., Neodron Ltd. v. STMicroelectronics, Inc. et al*, 6-20-cv-00560, ECF Nos. 13 (W.D. Tex.).

III. VENUE

14. Venue is proper in this District under 28 U.S.C. § 1400(b) because Defendants have committed acts of infringement in this District by, among other things, importing, offering to sell, and selling products that infringe the asserted patents and have a regular and established place of business in this District, including at 8501 N. Mo-Pac Expressway, Suite 420, Austin, Texas

78757. Moreover, Defendants have committed indirect acts of infringement in this District by inducing Avnet, Future Electronics, and Arrow to directly infringe the asserted patents by selling, offering for sale, or importing infringing products in this District.³ See *In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017).

15. STMicroelectronics, Inc. is and has been registered to do business in the State of Texas (SOS File No. 0005910106) since August 4, 1983.

16. Venue is also proper against STMicroelectronics N.V. in this District under 28 U.S.C. §1391(c)(3) because STMicroelectronics N.V. is a foreign corporation organized under the laws of The Netherlands and may be sued in any judicial district. *Brunette Mach. Works, Ltd. v. Kochum Indus., Inc.*, 406 U.S. 706, 711–714 (1972), cited by *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 n.2 (2017); see also *In re HTC Corp.*, 889 F.3d 1349, 1354 (Fed. Cir. 2018) (citing *Brunette Mach. Works*, 406 U.S. at 706).

17. Purdue does not waive its sovereign immunity as to any venue, including district courts and administrative tribunals, other than this Court, namely the United States District Court for the Western District of Texas, Waco Division.

IV. UNITED STATES PATENT NO. 7,498,633

18. United States Patent No. 7,498,633 (“’633 Patent”), titled “High-Voltage Power Semiconductor Device,” was duly and legally issued by the United States Patent and Trademark Office on March 3, 2009. A true and correct copy of the ’633 Patent is attached as Exhibit A and is publicly available at <https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7498633>.

³ https://www.st.com/content/st_com/en/contact-us.html (last accessed July 13, 2021).

19. The '633 Patent issued from U.S. Patent Application No. 11/338,007, which was filed on January 23, 2006, and claims priority to U.S. Provisional Application No. 60/646,152, which was filed on January 21, 2005.

20. The '633 Patent relates generally to semiconductor devices, and more particularly to useful, novel, and non-obvious semiconductor devices for high-voltage power applications.

21. The inventors of the '633 Patent are James A. Cooper, Ph.D. and Asmita Saha, Ph.D.

22. Dr. Cooper is a Jai N. Gupta Professor Emeritus of Electrical and Computer Engineering at Purdue and received his Ph.D. from Purdue in 1973. From 1973 to 1983, Dr. Cooper was a member of Technical Staff with Bell Laboratories, Murray Hill, NJ, where he was a Principal Designer of AT&T's first CMOS microprocessor and developed a time-of-flight technique for investigating high-field transport in silicon inversion layers. He joined the Purdue faculty in 1983, where he was the Founding Director of the Purdue Optoelectronics Research Center. Since 1990, Dr. Cooper has explored device technology in the wide bandgap semiconductor SiC (silicon carbide). His group demonstrated the first monolithic integrated circuits in SiC (1993), the first planar DMOS power transistors (1996), the first lateral DMOSFETs (1997), the first self-aligned short-channel DMOSFETs (2003), and a variety of other devices.

23. Dr. Saha was Dr. Cooper's student and, under his guidance, earned her doctorate from Purdue's School of Electrical and Computer Engineering, Birck Nanotechnology Center. Her thesis focused on optimized design and simulation and fabrication of 4H-SiC short-channel DMOSFETs.

24. Purdue is the owner of all rights, title, and interest in and to the '633 Patent with full right to enforce the '633 Patent, including the right to recover for past infringement damages

and the right to recover future royalties, damages, and income. On May 2, 2006, as recorded with the United States Patent and Trademark Office on May 18, 2006, Drs. Cooper and Saha assigned their rights and interests in the '633 Patent to Purdue Research Foundation. Thereafter, Purdue Research Foundation assigned its rights and interest in the '633 Patent to Purdue on June 18, 2021, as recorded with the United States Patent and Trademark Office on June 21, 2021.⁴

25. Every claim of the '633 Patent is valid and enforceable and enjoys a statutory presumption of validity pursuant to 35 U.S.C. § 282.

26. All requirements under 35 U.S.C. § 287 have been satisfied with respect to the '633 Patent.

27. ST has never, either expressly or impliedly, been licensed under the '633 Patent.

V. UNITED STATES PATENT NO. 8,035,112

28. United States Patent No. 8,035,112 ("'112 Patent"), titled "SIC Power DMOSFET with Self-aligned Source Contact," was duly and legally issued by the United States Patent and Trademark Office on October 11, 2011. A true and correct copy of the '112 Patent is attached as Exhibit B and is available at <https://pdfpiw.uspto.gov/piw?PageNum=0&docid=8035112>.

29. The '112 Patent issued from U.S. Patent Application No. 12/429,176, which was filed on April 23, 2009, and claims priority to U.S. Provisional Application No. 61/047,274, which was filed on April 23, 2008.

30. The '112 Patent relates generally to semiconductor field effect transistors, and more particularly to useful, novel, and non-obvious field effect transistors having self-aligned source contacts.

⁴ <https://assignment.uspto.gov/patent/index.html#/patent/search/resultAbstract?id=7498633&type=patNum>.

31. The inventors of the '112 Patent are James A. Cooper, Ph.D. and Asmita Saha, Ph.D.

32. Purdue is the owner of all rights, title, and interest in and to the '112 Patent with full right to enforce the '112 Patent, including the right to recover for past infringement damages and the right to recover future royalties, damages, and income. On July 6, 2009, as recorded with the United States Patent and Trademark Office on August 7, 2009, Drs. Cooper and Saha assigned their rights and interests in the '112 Patent to Purdue Research Foundation. Thereafter, Purdue Research Foundation assigned its rights and interest in the '112 Patent to Purdue on June 18, 2021, as recorded with the United States Patent and Trademark Office on June 18, 2021.⁵

33. Every claim of the '112 Patent is valid and enforceable and enjoys a statutory presumption of validity pursuant to 35 U.S.C. § 282.

34. All requirements under 35 U.S.C. § 287 have been satisfied with respect to the '112 Patent.

35. ST has never, either expressly or impliedly, been licensed under the '112 Patent.

VI. INFRINGEMENT OF THE '633 PATENT

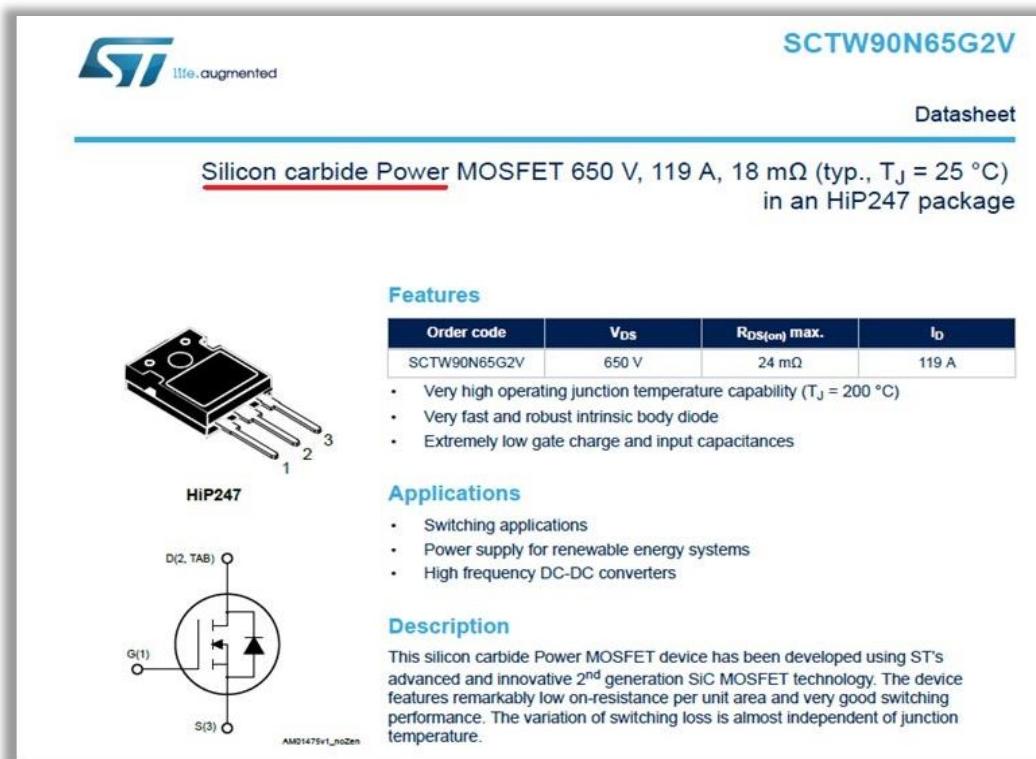
36. ST has been and continues to directly and/or indirectly (by inducement and/or contributory infringement) and willfully infringe one or more claims of the '633 Patent in violation of 35 U.S.C. § 271, including, but not limited to claim 9.

37. ST has and continues to directly infringe the '633 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing in or into the United States, without authority, products that fall within the scope of one or more claims of the '633 Patent in violation of 35 U.S.C. § 271(a), including but not limited to the following SiC power

⁵ <https://assignment.uspto.gov/patent/index.html#/patent/search/resultAbstract?id=8035112&type=patNum>.

MOSFETs (metal-oxide semiconductor field-effect transistors): SCT1000N170AG, SCT20N170AG, SCTWA35N65G2VAG, SCTH100N65G2-7AG, SCTH35N65G2V-7, SCTH35N65G2V-7AG, SCTH90N65G2V-7, SCTW100N65G2AG, SCTW35N65G2V, SCTW35N65G2VAG, SCTW90N65G2V, SCTWA35N65G2V, and SCTWA90N65G2V (collectively, the “Accused Products”), as shown in Exhibit C.⁶

38. For example, each of the Accused Products (such as SCTW90N65G2V) is a double-implanted MOSFET.



39. Each of the Accused Products includes a silicon carbide substrate, a drift semiconductor layer formed on the front side of the substrate, a first source region, a first source electrode formed over the first source region defining a longitudinal axis, and a plurality of first

⁶ This chart is exemplary of all Accused Products.

base contact regions defined in the first source region, each of which is spaced apart from the others in a direction parallel to the longitudinal axis defined by the first source electrode.

40. Each of the Accused Products also includes a second source region, a second source electrode formed over the second source region defining a longitudinal axis, and a plurality of second base contact regions defined in the second source region, each of which is spaced apart from the others in a direction parallel to the longitudinal axis defined by the second source electrode.

41. Each of the Accused Products also includes a JFET region, with a width less than about three micrometers, defined between the first source region and the second source region.

42. Purdue adopts and incorporates by reference as if fully stated herein, the attached exemplary claim chart (Exhibit C), which further describes and demonstrates how ST infringes at least claim 9 of the '633 Patent. In addition, Purdue alleges that ST infringes one or more additional claims of the '633 Patent in a similar manner.

43. ST has and continues to indirectly infringe the '633 Patent by inducing others to infringe one or more claims of the '633 Patent through making, using, selling, offering for sale, distributing, and/or importing the Accused Products. For example, ST induces its distributors like Arrow to directly infringe the '633 Patent by selling, offering for sale, or importing in or into the United States the Accused Products, including the State of Texas and this District.⁷

⁷ <https://www.st.com/en/power-transistors/sctw90n65g2v.html#sample-buy>;
https://www.arrow.com/en/support/contact-support/find-an-arrow-office?country=US_Offices;
https://www.st.com/content/st_com/en/contact-us.html (listing even distributor locations);
<https://www.arrow.com/en/products/sctw90n65g2v/stmicroelectronics>; (last accessed July 13, 2021).

The screenshot shows a product page for the SCTW90N65G2V MOSFET. At the top, there are tabs for Overview, Sample & Buy (which is selected), Documentation, CAD Resources, and Quality & Reliability. A search bar below the tabs contains the text "Find all our CAD and simulation models". The main content area is titled "Sample & Buy" and displays a table with product details. The table includes columns for Part Number (SCTW90N65G2V), Order from Distributors, Order from ST, Marketing Status (ACTIVE), ECCN (US) (99), ECCN (EU) (99), Packing Type (Tube), Package (HIP247), Temperature (°C) (min, max), Country of Origin (CHINA), and Budgetary Price (US\$)/Qty (39.0 / 1k). Below the table, a section titled "Distributor availability of SCTW90N65G2V" lists three distributors: ARROW, Farnell Element14, and RS COMPONENTS, each with a "Order Now" button.

Part Number	Order from Distributors	Order from ST	Marketing Status	ECCN (US)	ECCN (EU)	Packing Type	Package	Temperature (°C)	Country of Origin	Budgetary Price (US\$)/Qty
SCTW90N65G2V	Available at 3 distributors		ACTIVE	EAR99	NEC	Tube	HIP247	min max	CHINA	39.0 / 1k

Distributor reported inventory date: 2020-12-03

44. ST was and has been aware of the '633 Patent and its coverage of SiC power MOSFETs, including at least the Accused Products, since at least April 2021, when Purdue sent ST a notice letter, and no later than service of this Complaint, and was aware that its actions as to importers, distributors, resellers, wholesalers, retailers, and/or end-users of the Accused Products would induce infringement. For example, ST knowingly and intentionally instructs its customers, distributors, end-users, and/or other third parties to infringe at least through user manuals, product documentation, services, and other materials, such as those located on ST's website at https://www.st.com/content/st_com/en/products/sic-devices/sic-mosfets.html and other websites such as at <https://www.youtube.com/watch?v=hV5mqmuozlA>. By providing instruction and training to customers and end-users on how to use the Accused Products, in order to promote the sales of these products, in a manner that directly infringes one or more claims of the '633 Patent, including at least claim 9, ST specifically intended to induce infringement of the '633 Patent.

45. Despite such awareness of the '633 Patent and its coverage of SiC power MOSFETs, including at least the Accused Products, ST continues to take active steps (*e.g.*, creating and disseminating the Accused Products and other SiC power MOSFETs with similar infringing technology, as well as product manuals, instructions, promotional and marketing materials, and/or technical materials to distributors, resellers, wholesalers, retailers, and end-users) by encouraging others to infringe the '633 Patent with the specific intent to induce such infringement. Accordingly, ST has known and intended that its products infringe the '633 Patent and that ST's continued actions would actively induce the infringement of the '633 Patent claims.

46. ST has continued making, using, offering for sale, selling, and importing the Accused Products despite an objectively high likelihood that its actions infringe at least one claim of the '633 Patent—a valid and enforceable patent, and such objective risk of infringement was known to ST or so obvious that ST should have known it. Therefore, Purdue is entitled to receive enhanced damages up to three times the amount of actual damages for ST's willful infringement pursuant to 35 U.S.C. § 284.

47. ST's direct, indirect, and willful infringement of the '633 Patent has caused, and will continue to cause, substantial and irreparable damage to Purdue. Purdue is, therefore, entitled to an award of damages adequate to compensate for ST's infringement of the '633 Patent, but in no event less than a reasonable royalty for ST's use and/or sale of Purdue's invention, together with pre- and post-judgment interest, attorneys' fees, and costs as fixed by the Court under 35 U.S.C. §§ 284 and 285.

VII. INFRINGEMENT OF THE '112 PATENT

48. ST has been and continues to directly and/or indirectly (by inducement and/or contributory infringement) and willfully infringe one or more claims of the '112 Patent in violation of 35 U.S.C. § 271, including, but not limited to claim 6.

49. ST has and continues to directly infringe the '112 Patent, literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing in or into the United States, without authority, the Accused Products, which fall within the scope of one or more claims of the '112 Patent in violation of 35 U.S.C. § 271(a), as shown in Exhibit D.⁸

50. For example, each of the Accused Products (such as SCTW90N65G2V) is a MOSFET.

SCTW90N65G2V

Datasheet

Silicon carbide Power MOSFET 650 V, 119 A, 18 mΩ (typ., $T_J = 25^\circ\text{C}$) in an HiP247 package

Features

Order code	V_{DS}	$R_{DS(on)\max.}$	I_D
SCTW90N65G2V	650 V	24 mΩ	119 A

- Very high operating junction temperature capability ($T_J = 200^\circ\text{C}$)
- Very fast and robust intrinsic body diode
- Extremely low gate charge and input capacitances

Applications

- Switching applications
- Power supply for renewable energy systems
- High frequency DC-DC converters

Description

This silicon carbide Power MOSFET device has been developed using ST's advanced and innovative 2nd generation SiC MOSFET technology. The device features remarkably low on-resistance per unit area and very good switching performance. The variation of switching loss is almost independent of junction temperature.

51. Each of the Accused Products includes a silicon carbide wafer having a substrate body with an upper surface, at least one source region formed adjacent to the upper surface, a substrate surface oxidation layer on the upper surface of the substrate body and adjacent source region, and at least two polysilicon gates above the substrate surface oxidation layer (each with a

⁸ This chart is exemplary of all Accused Products.

top, a bottom and sides), wherein a first source region of the at least one source region is juxtaposed between first and second adjacent gates of the at least two polysilicon gates.

52. Each of the Accused Products also includes a gate oxide layer (thicker than the substrate surface oxidation layer) over the tops and sides of each of the polysilicon gates and a material layer, including one of an oxide and a metal contact, over the first source region and between the gate oxide layers on the sides of the polysilicon gates.

53. Purdue adopts and incorporates by reference as if fully stated herein, the attached exemplary claim chart (Exhibit D), which further describes and demonstrates how ST infringes at least claim 6 of the '112 Patent. In addition, Purdue alleges that ST infringes one or more additional claims of the '112 Patent in a similar manner.

54. ST has and continues to indirectly infringe the '112 Patent by inducing others to infringe one or more claims of the '112 Patent through making, using, selling, offering for sale, distributing, and/or importing the Accused Products. For example, ST induces its distributors like Arrow to directly infringe the '112 Patent by selling, offering for sale, or importing in or into the United States the Accused Products, including the State of Texas and this District.⁹

⁹ <https://www.st.com/en/power-transistors/sctw90n65g2v.html#sample-buy>;
https://www.arrow.com/en/support/contact-support/find-an-arrow-office?country=US_Offices;
https://www.st.com/content/st_com/en/contact-us.html (listing even distributor locations);
<https://www.arrow.com/en/products/sctw90n65g2v/stmicroelectronics>; (last accessed July 13, 2021).

The screenshot shows the product page for the SCTW90N65G2V MOSFET. At the top, there are tabs for Overview, Sample & Buy (which is selected), Documentation, CAD Resources, and Quality & Reliability. A pink bracket highlights the 'Find all our CAD and simulation models' link under the CAD Resources tab. Below the tabs, there's a search bar and a table with product details. The table includes columns for Part Number (SCTW90N65G2V), Order from Distributors (Available at 3 distributors), Marketing Status (ACTIVE), ECCN (EAR99, NEC), Packing Type (Tube), Package (HIP247), Temperature (°C) (min, max), Country of Origin (CHINA), and Budgetary Price (US\$)/Qty. A pink bracket also highlights the 'Order Now' buttons for each distributor listed in the availability table.

Part Number	Order from Distributors	Marketing Status	ECCN (US)	ECCN (EU)	Packing Type	Package	Temperature (°C)	Country of Origin	Budgetary Price (US\$)/Qty
SCTW90N65G2V	Available at 3 distributors	ACTIVE	EAR99	NEC	Tube	HIP247	min max	CHINA	39.0 / 1k

Distributor availability of **SCTW90N65G2V**

Distributor Name	Region	Stock	Min. Order	Third party link
ARROW	AMERICA	1	600	Order Now →
Farnell Element14	EUROPE	200	1	Order Now →
RS COMPONENTS	EUROPE	365	1	Order Now →

Distributor reported inventory date: 2020-12-03

55. ST was and has been aware of the '112 Patent and its coverage of SiC power MOSFETs, including at least the Accused Products, since at least April 2021, when Purdue sent ST a notice letter, and no later than service of this Complaint, and was aware that its actions as to importers, distributors, resellers, wholesalers, retailers, and/or end-users of the Accused Products would induce infringement. For example, ST knowingly and intentionally instructs its customers, distributors, end-users, and/or other third parties to infringe at least through user manuals, product documentation, services, and other materials, such as those located on ST's website at https://www.st.com/content/st_com/en/products/sic-devices/sic-mosfets.html and other websites such as at <https://www.youtube.com/watch?v=hV5mqmuozlA>. By providing instruction and training to customers and end-users on how to use the Accused Products, in order to promote the sales of these products, in a manner that directly infringes one or more claims of the '112 Patent, including at least claim 6, ST specifically intended to induce infringement of the '112 Patent.

56. Despite such awareness of the '112 Patent and its coverage of SiC power MOSFETs, including at least the Accused Products, ST continues to take active steps (*e.g.*, creating and disseminating the Accused Products and other SiC power MOSFETs with similar infringing technology, as well as product manuals, instructions, promotional and marketing materials, and/or technical materials to distributors, resellers, wholesalers, retailers, and end-users) by encouraging others to infringe the '112 Patent with the specific intent to induce such infringement. Accordingly, ST has known and intended that its products infringe the '112 Patent and that ST's continued actions would actively induce the infringement of the '112 Patent claims.

57. ST has continued making, using, offering for sale, selling, and importing the Accused Products despite an objectively high likelihood that its actions infringe at least one claim of the '112 Patent—a valid and enforceable patent, and such objective risk of infringement was known to ST or so obvious that ST should have known it. Therefore, Purdue is entitled to receive enhanced damages up to three times the amount of actual damages for ST's willful infringement pursuant to 35 U.S.C. § 284.

58. ST's direct, indirect, and willful infringement of the '112 Patent has caused, and will continue to cause, substantial and irreparable damage to Purdue. Purdue is, therefore, entitled to an award of damages adequate to compensate for ST's infringement of the '112 Patent, but in no event less than a reasonable royalty for ST's use and/or sale of Purdue's invention, together with pre- and post-judgment interest, attorneys' fees, and costs as fixed by the Court under 35 U.S.C. §§ 284 and 285.

VIII. JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff hereby demands a trial by jury on all issues triable as such.

IX. PRAYER

WHEREFORE, Plaintiff requests the following relief:

- A. A judgment that the '633 Patent and the '112 Patent are valid and enforceable;
- B. A judgment that Defendants have infringed and continue to infringe the '633 Patent and the '112 Patent as alleged herein;
- C. A judgment and order requiring Defendants to pay Plaintiff damages under 35 U.S.C. § 284, and supplemental damages for any continuing post-verdict infringement through entry of the final judgment with an accounting as needed;
- D. A judgment that this is an exceptional case within the meaning of 35 U.S.C. § 285 and Plaintiff is therefore entitled to reasonable attorneys' fees;
- E. A judgment and order requiring Defendants to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;
- F. A judgment and order awarding Plaintiff costs associated with bringing this action; and
- G. Such other and further relief as the Court deems just and proper.

Dated: July 14, 2021

Respectfully submitted,

/s/ Mark D. Siegmund

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